

REMARKS**INTRODUCTION**

In accordance with the foregoing, claims 1, 9, 14, 20, 22, and 24 have been amended, and claims 4, 12, 18, 26, and 17 have been canceled, without prejudice or disclaimer.

Reconsideration of the allowability of the pending claims is respectfully requested.

Claims 1-25 are pending and under consideration.

REJECTION UNDER 35 USC 102

Claims 1-3, 5-11, 13 and 20-25 stand rejected under 35 USC 102(b) as being anticipated by Rosenquist et al., U.S. Patent No. 6,188,323. This rejection is respectfully requested.

Rosenquist et al. demonstrates that conventionally, to overcome problems overcome by embodiments of the present, it was necessary to use a separately located light emitting element and light receiving element to determine whether a substrate was present in a carrier.

FIGS. 3A-3C of the present application demonstrate potential problems with a co-located light emitting element and light receiving element, i.e., that it is difficult to accurately determine whether a substrate is a slot of the carrier. As shown in FIG. 3A, if the light emitting element and light receiving element is centrally located, then a present wafer will incorrectly indicate the non-presence of a substrate. Similarly, as shown in FIG. 3B, if the substrate is square or the adjacent surface of the substrate is flat across the length of the substrate, then any co-located light emitting and light receiving element will potentially incorrectly indicate the non-presence of a substrate.

Thus, to avoid such a problem, the system of Rosenquist et al. uses a light emitting element that is physically separated from the light receiving element. As noted in the Office Action, the determination of whether a substrate is present in the carrier is determined by whether the angled illumination of light is received by an oppositely angled receiving element. In addition, as shown in FIG. 13 of Rosenquist et al., the reflector of Rosenquist et al. does not appear to be provided at a lateral end of the plurality of slots, but rather a median end.

Conversely, as noted above, independent claims 1, 9, 14, and 20 have been amended to further require the plurality of slots to be "provided in parallel to the allow planar objects to be inserted therein" and the at least one reflector to be "provided at at least one lateral end of the plurality of slots." Here, independent claim 24 already sets forth such a particularly claimed

reflector lateral arrangement. Independent claim 22 sets forth that the reflector is provided lengthwise along the slots and claims irradiating the light beam while moving the sensor along a longitudinal direction of the at least one reflector.

It is respectfully submitted that Rosenquist et al. fails to disclose or suggest such a parallel provided plurality of slots, the at least one lateral end provided at least one reflector, or the claimed irradiation method. In this regard, the arrangement and operation of Rosenquist et al. are different from the presently claimed invention.

Accordingly, at least in view of the above, it is respectfully requested that this rejection of claims 1-13 and 20-25.

REJECTION UNDER 35 USC 103

Claims 14-17 and 19 stand rejected under 35 USC 103 as being obvious over Rosenquist et al., in view of Hofmeister, U.S. Patent No. 6,960,057. This rejection is respectfully traversed.

It is respectfully submitted that Hofmeister fails to disclose or suggest the above mentioned deficient features of Rosenquist et al. It is further respectfully submitted that neither Rosenquist et al. nor Hofmeister, alone or in combination, disclose or suggest at least the above mentioned deficient features.

Withdrawal of this rejection is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Serial No. 10/827,357

Docket No.: 1594.1333

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

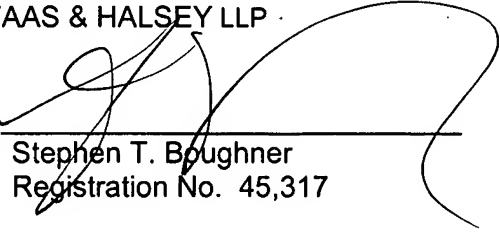
Respectfully submitted,

STAAS & HALSEY LLP

Date:

6/5/07

By:


Stephen T. Boughner
Registration No. 45,317

1201 New York Avenue, NW, 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501